

FIG. 1
PRIOR ART

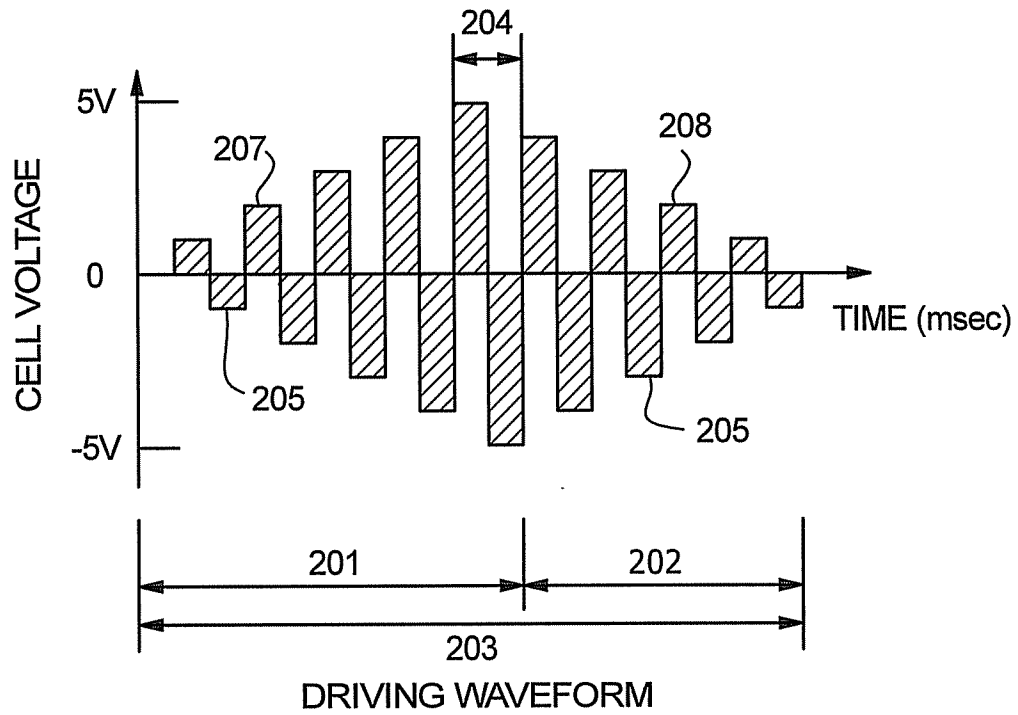


FIG. 2A

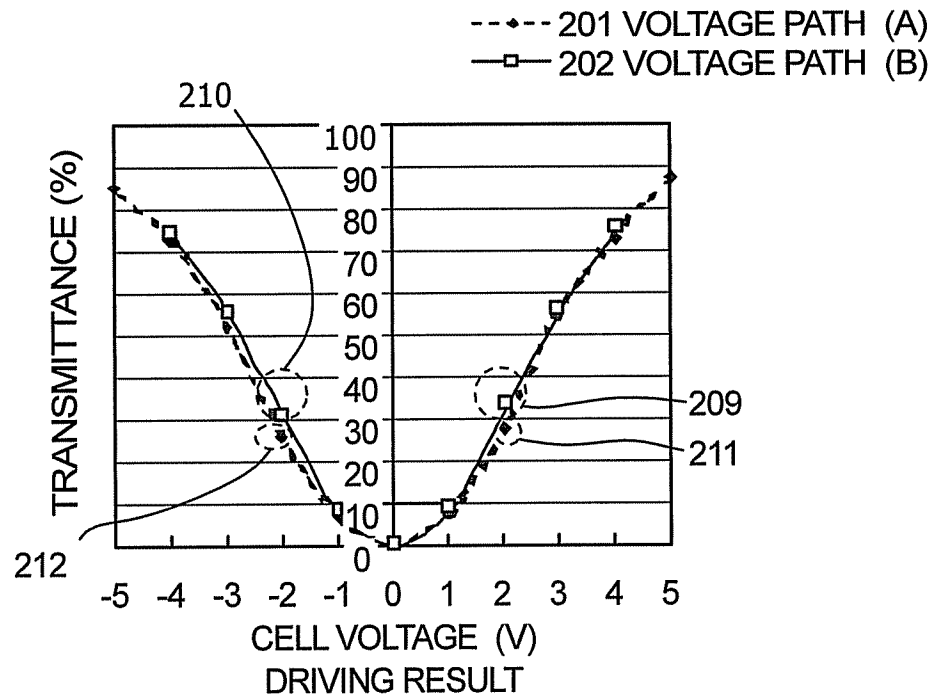
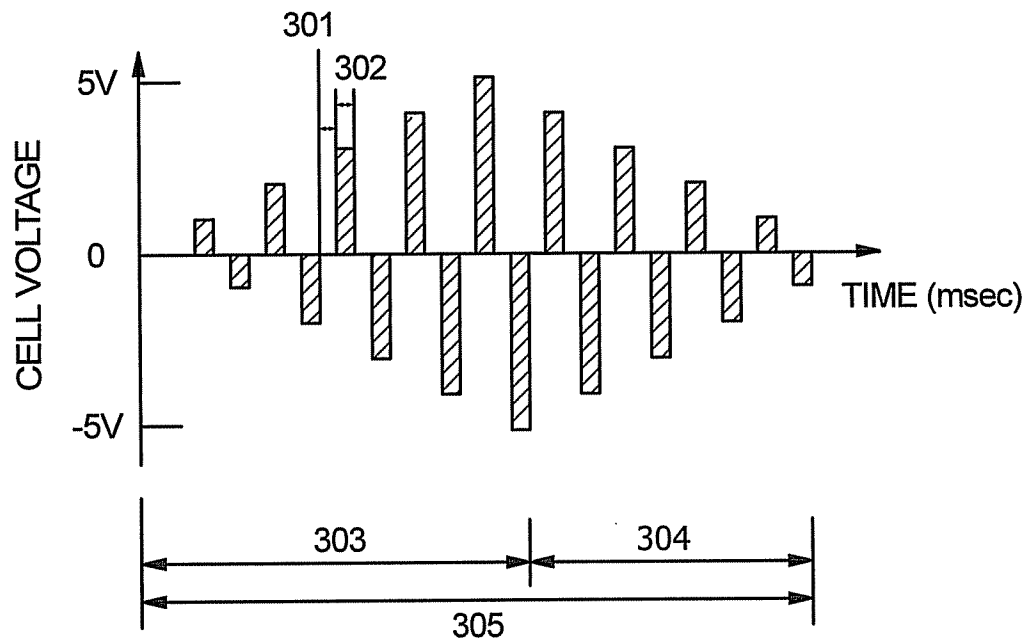
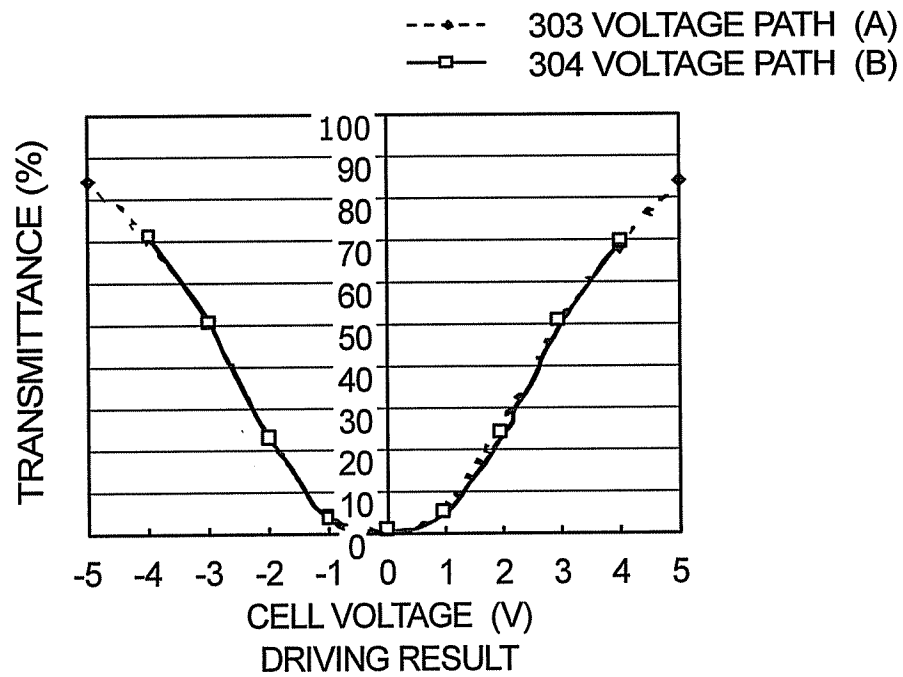


FIG. 2B

DRIVING WAVEFORM AND DRIVING RESULT
WHEN "OV" RESET PERIOD IS NOT PROVIDED



DRIVING WAVEFORM

FIG. 3A*FIG. 3B*

DRIVING WAVEFORM AND DRIVING RESULT
WHEN "OV" RESET PERIOD IS NOT PROVIDED

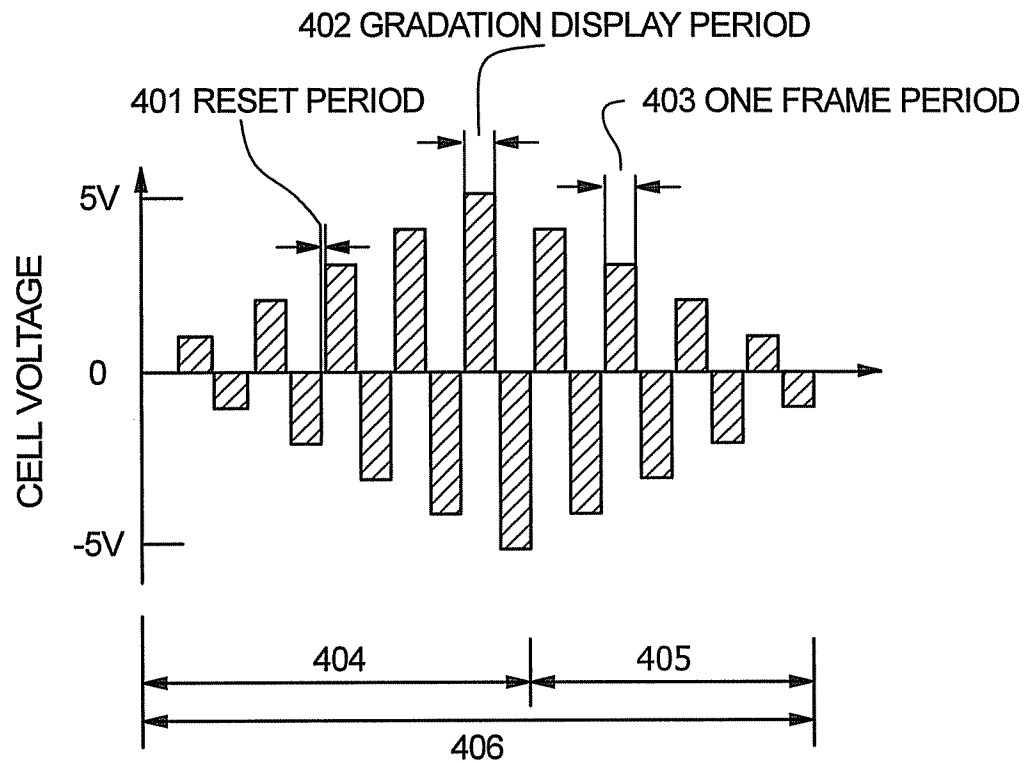


FIG. 4A

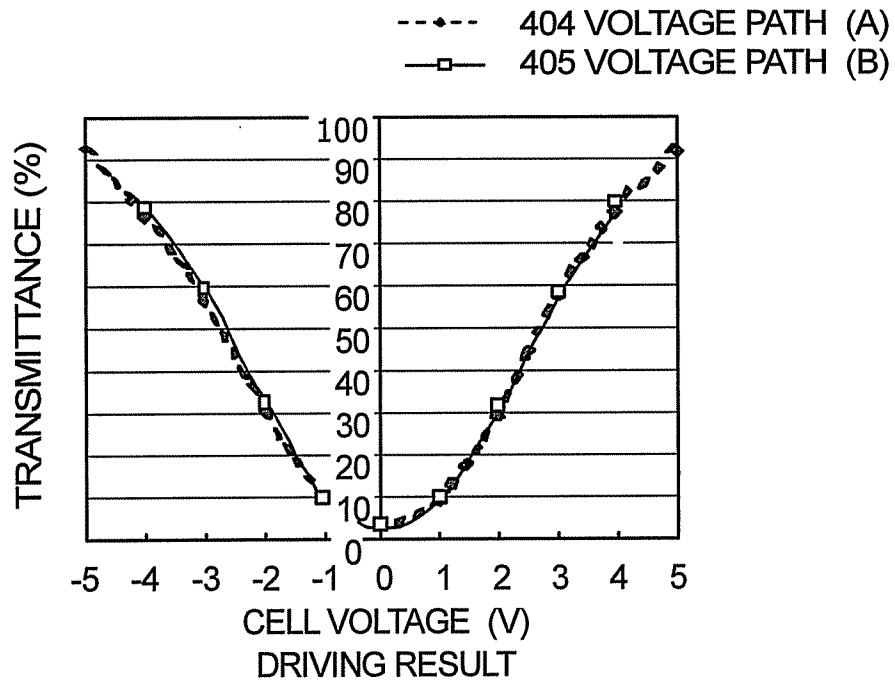
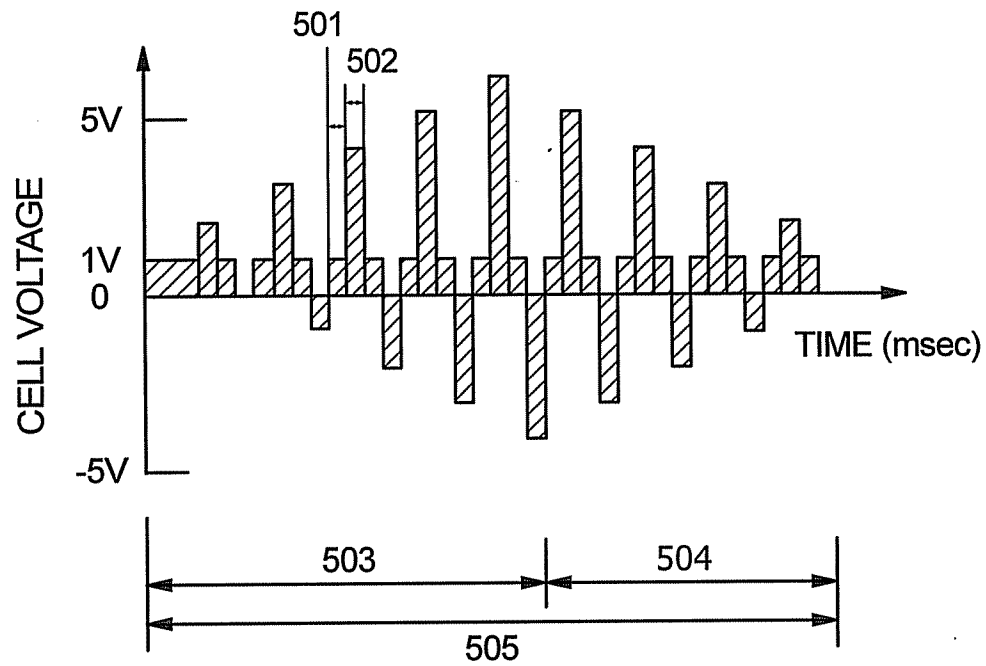
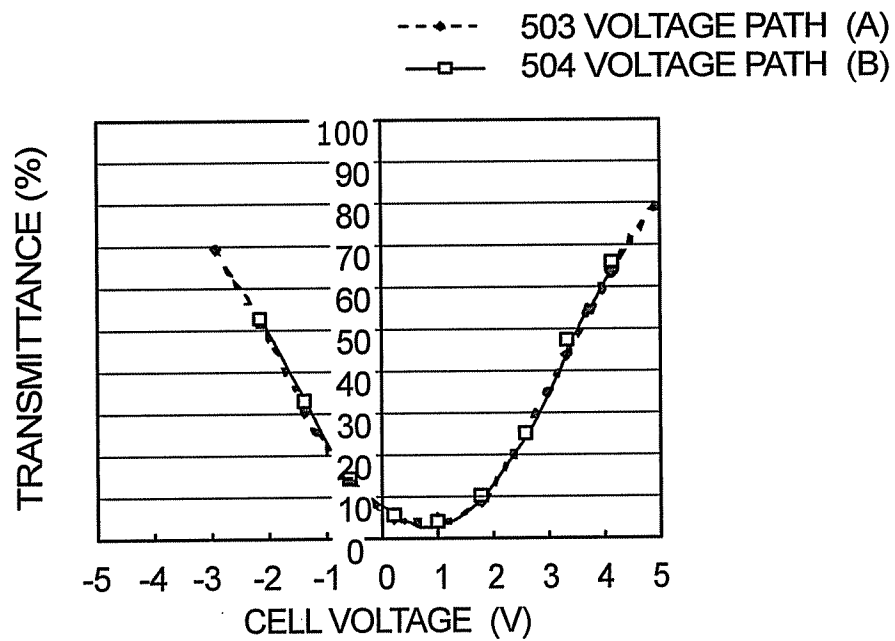


FIG. 4B

DRIVING WAVEFORM AND DRIVING RESULT
 WHEN "OV" RESET PERIOD IS SHORT
 RESET PERIOD: 2msec GRADATION DISPLAY PERIOD: 14.6msec



DRIVING WAVEFORM

FIG. 5A

DRIVING RESULT

FIG. 5B

DRIVING WAVEFORM AND DRIVING RESULT
WHEN RESET VOLTAGE OF "1V" IS PROVIDED

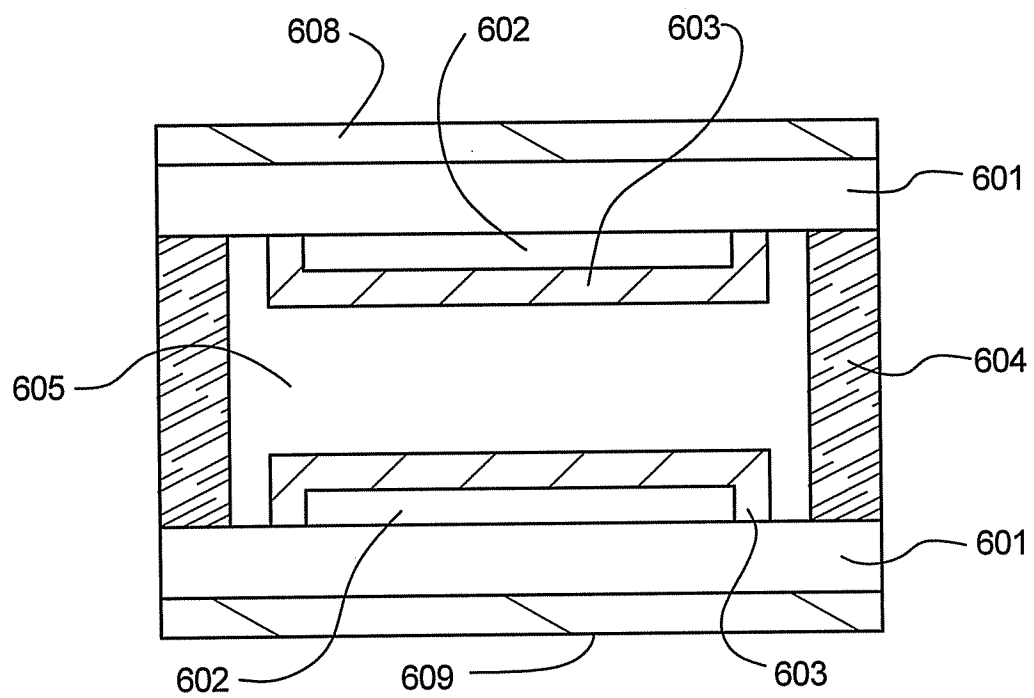


FIG. 6A

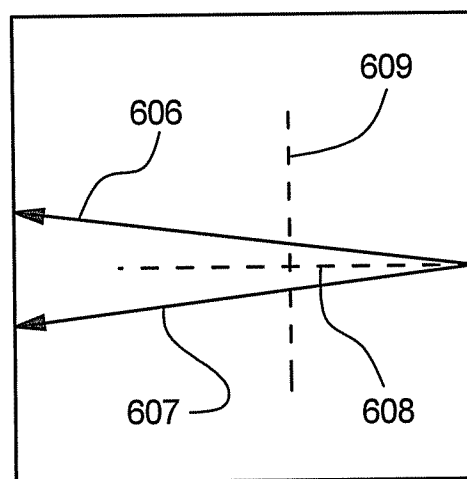


FIG. 6B



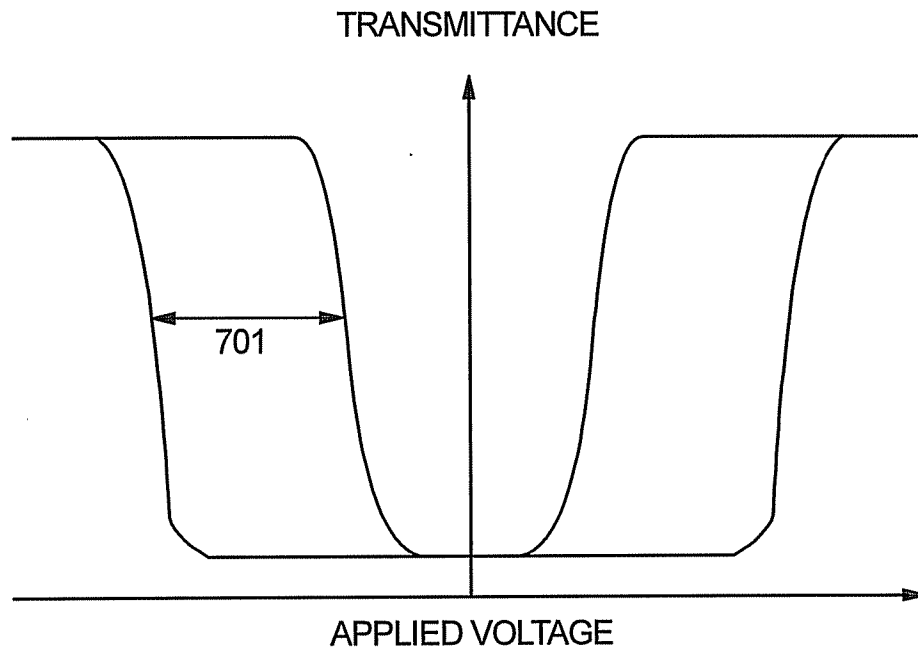


FIG. 7A
PRIOR ART

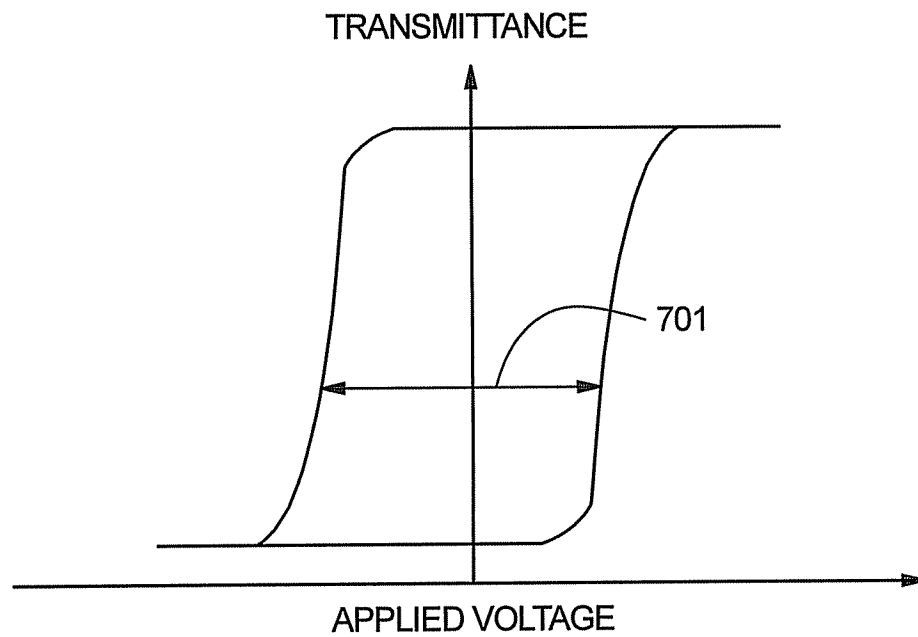


FIG. 7B
PRIOR ART

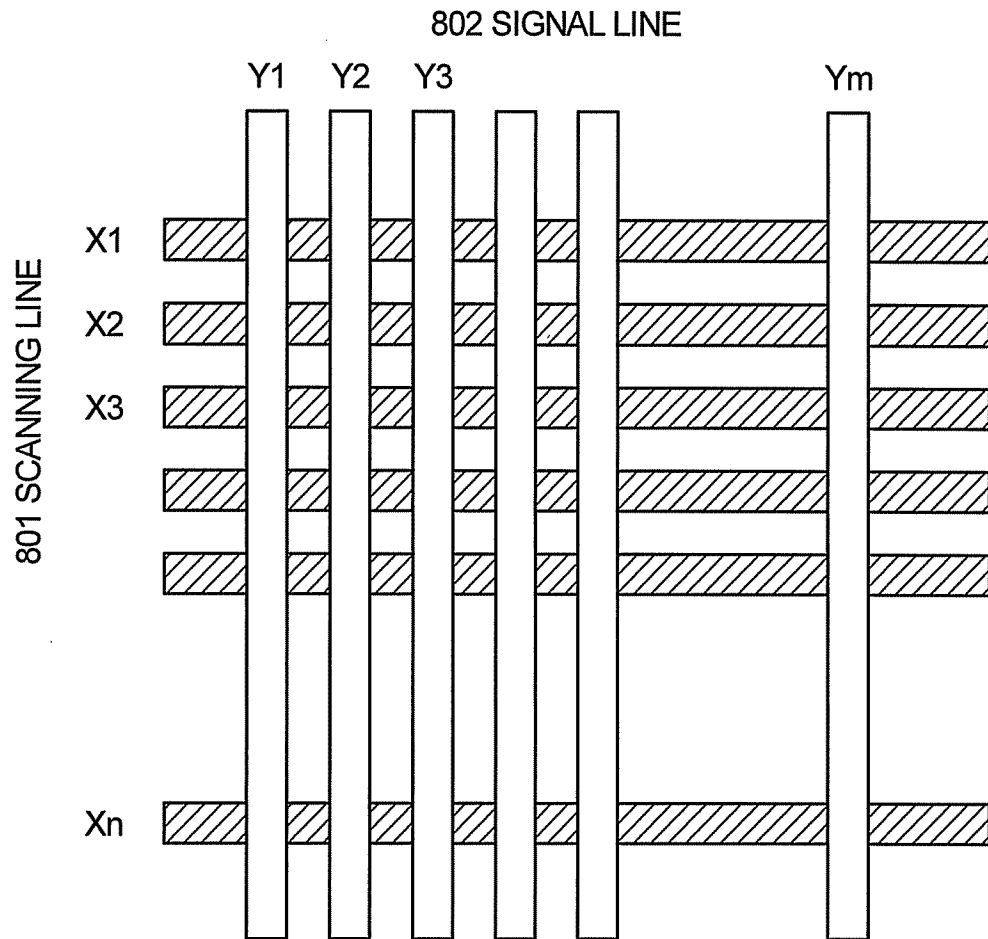
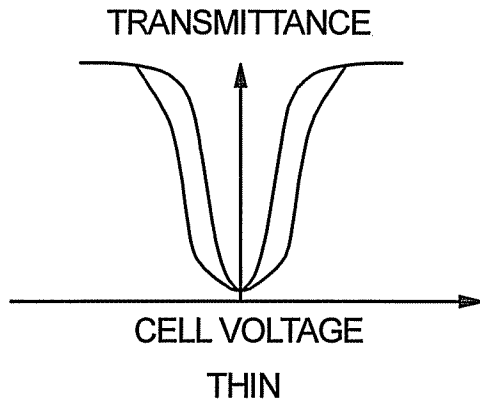
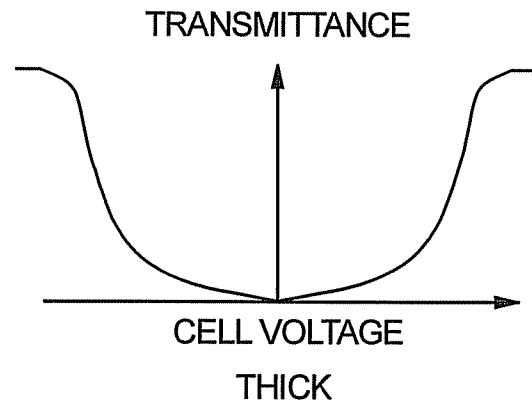
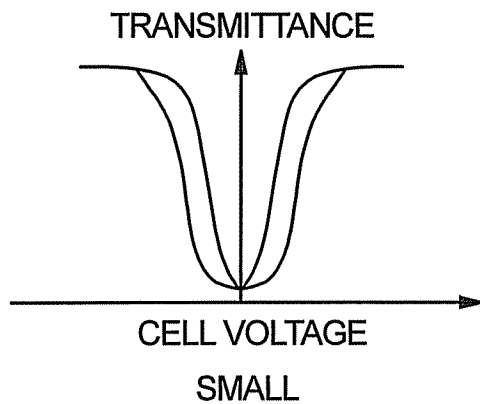
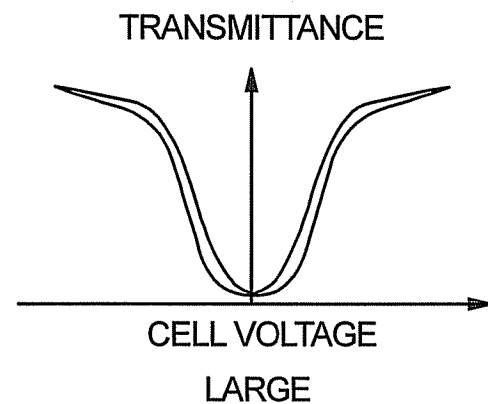


FIG. 8
PRIOR ART

*FIG. 9A**FIG. 9B*

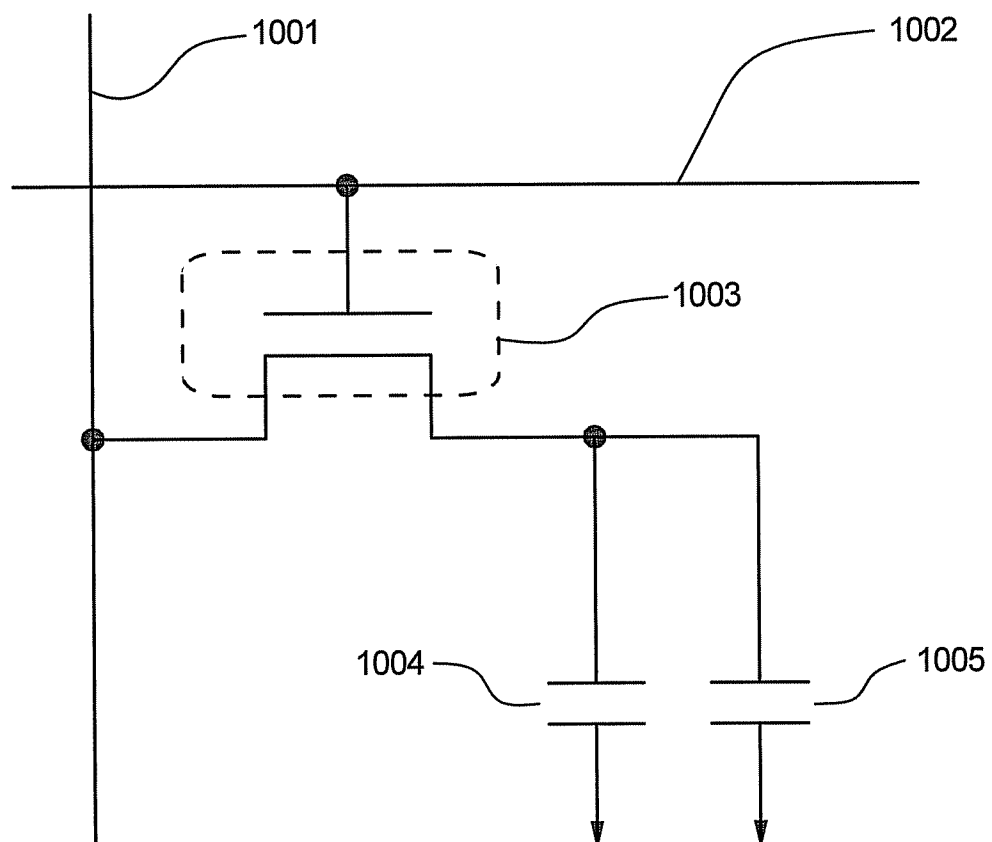
ORIENTATION FILM THICKNESS

*FIG. 9C**FIG. 9D*

SPONTANEOUS POLARIZATION

CHARACTERISTICS OF HYSTERESIS OF THRESHOLDLESS LIQUID CYRSTAL



*FIG. 10*

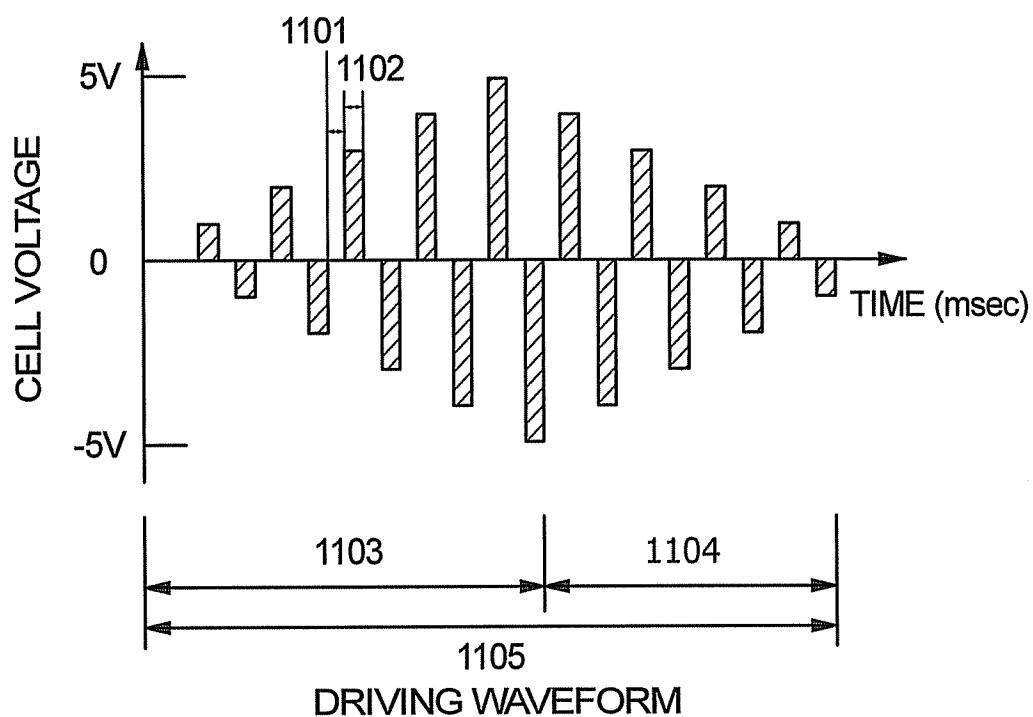


FIG. 11A

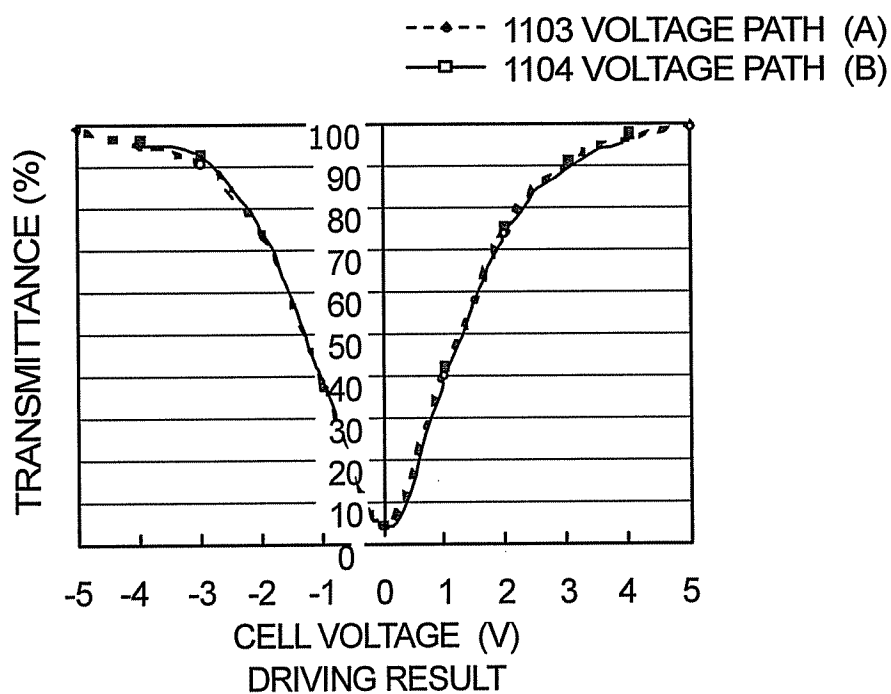
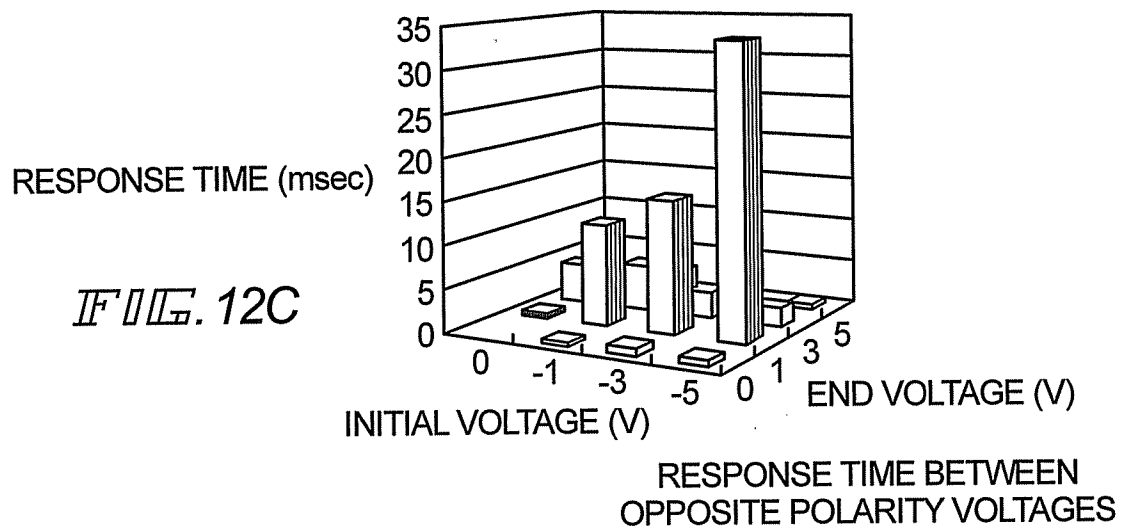
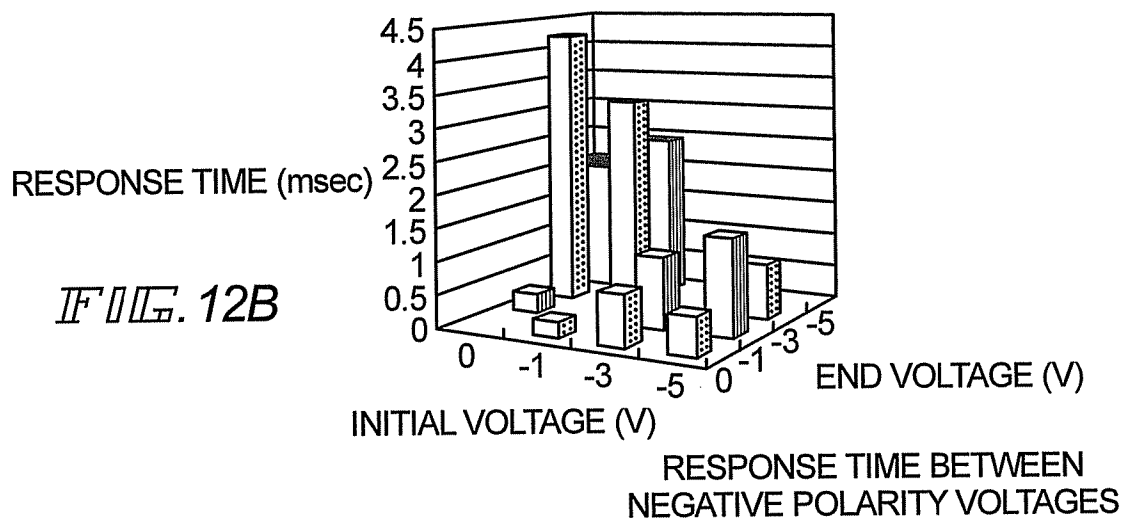
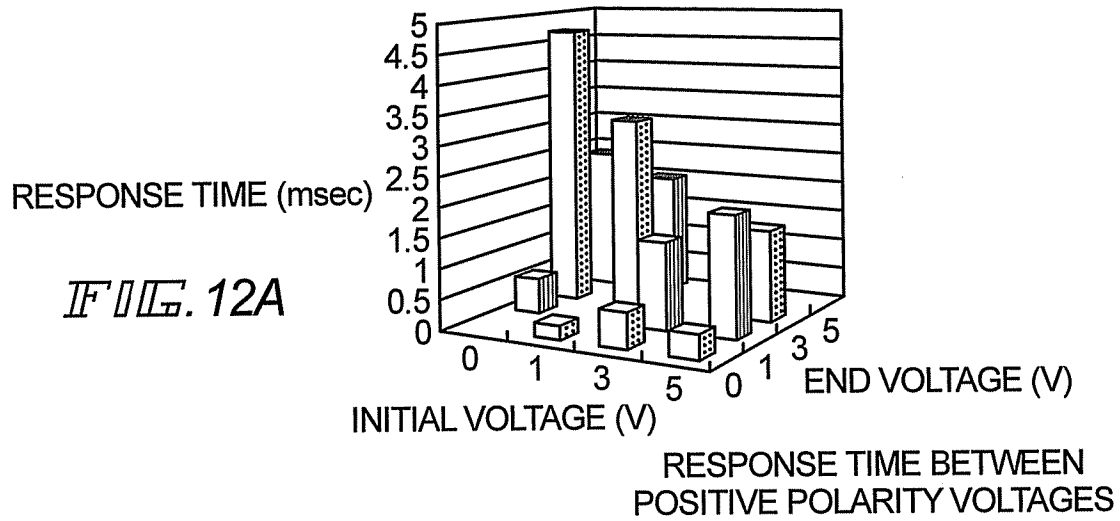


FIG. 11B

DRIVING WAVEFORM AND DRIVING RESULT
 WHEN "OV" RESET PERIOD IS PROVIDED
 SPONTANEOUS POLARIZATION OF LIQUID CRYSTAL: 40 nC/cm²



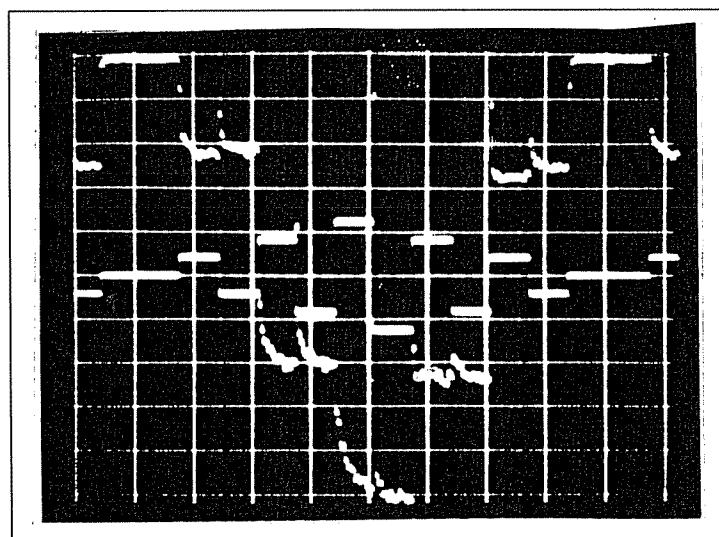
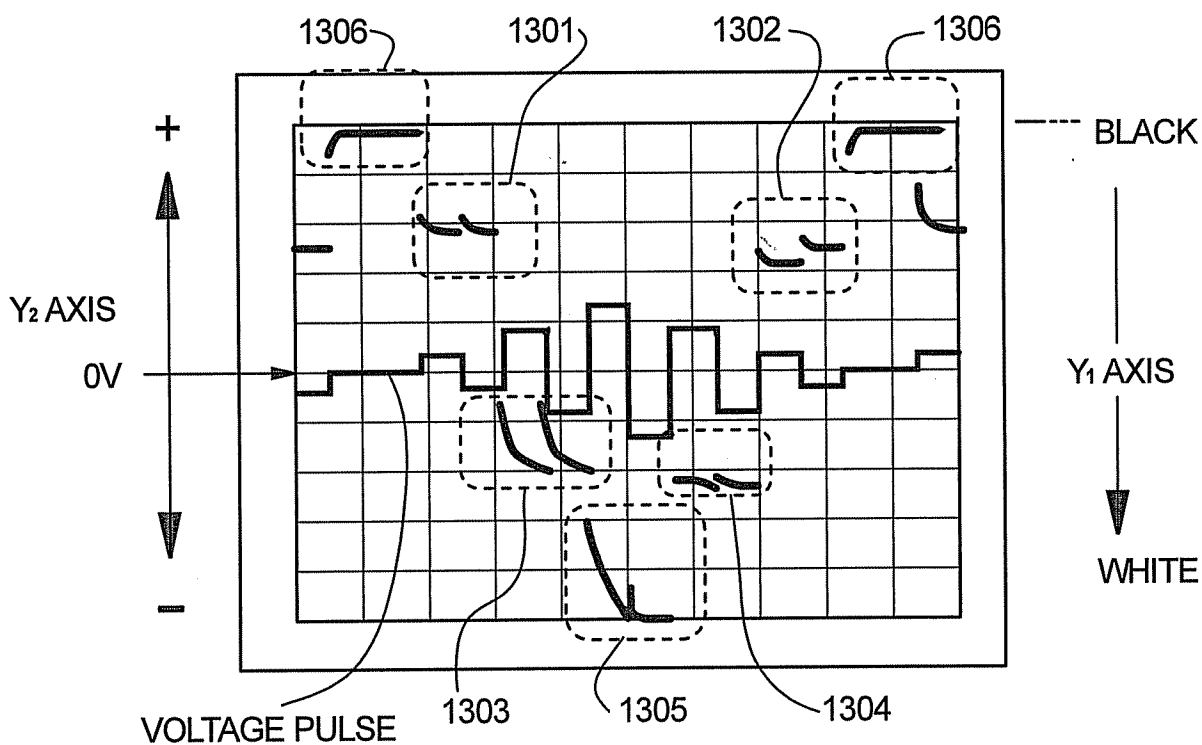
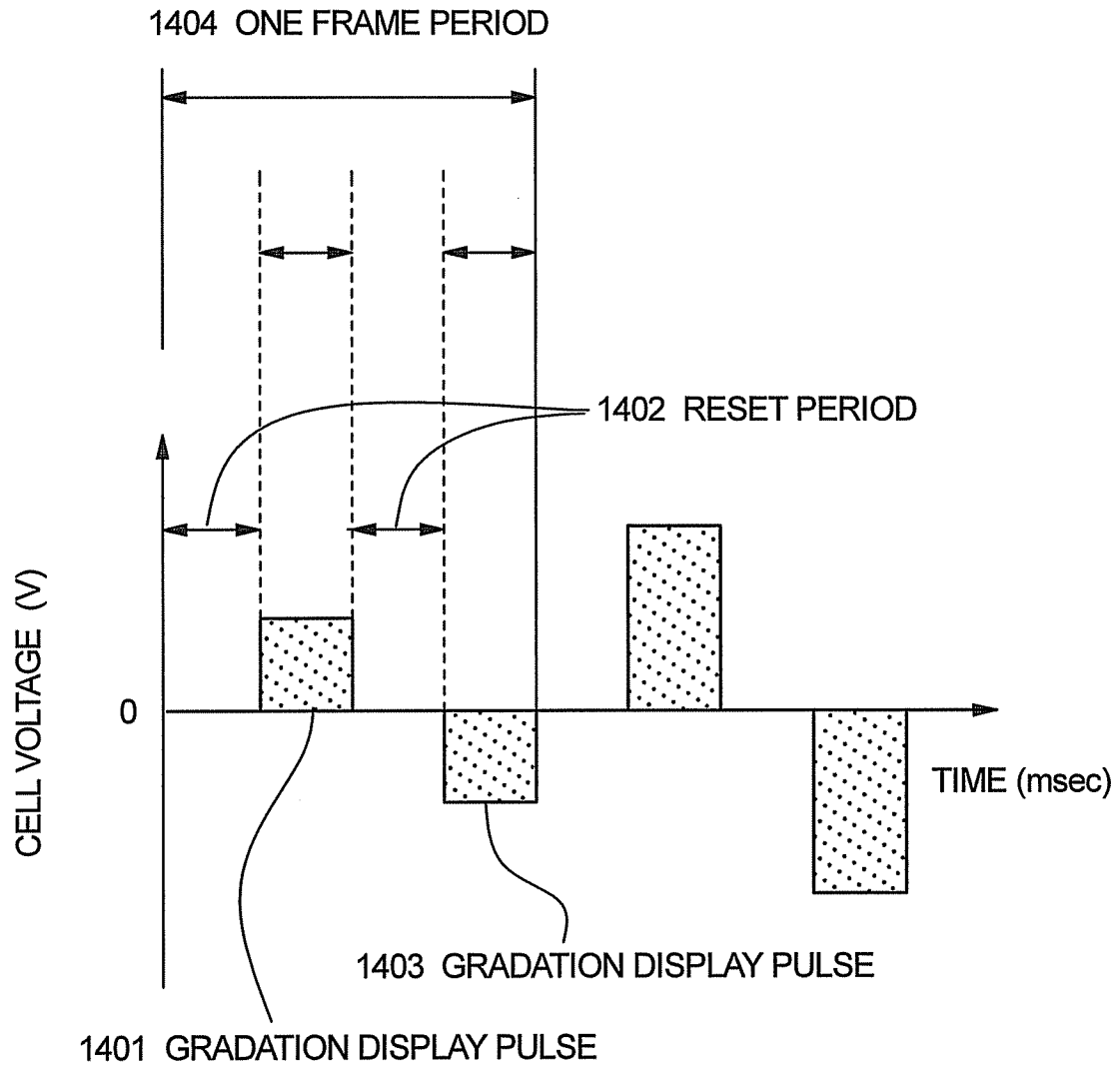


FIG. 13A



OPTICAL RESPONSE OF THRESHOLDLESS LIQUID CRYSTAL
WHEN "0V" RESET PERIOD IS NOT PROVIDED

FIG. 13B

*FIG. 14*

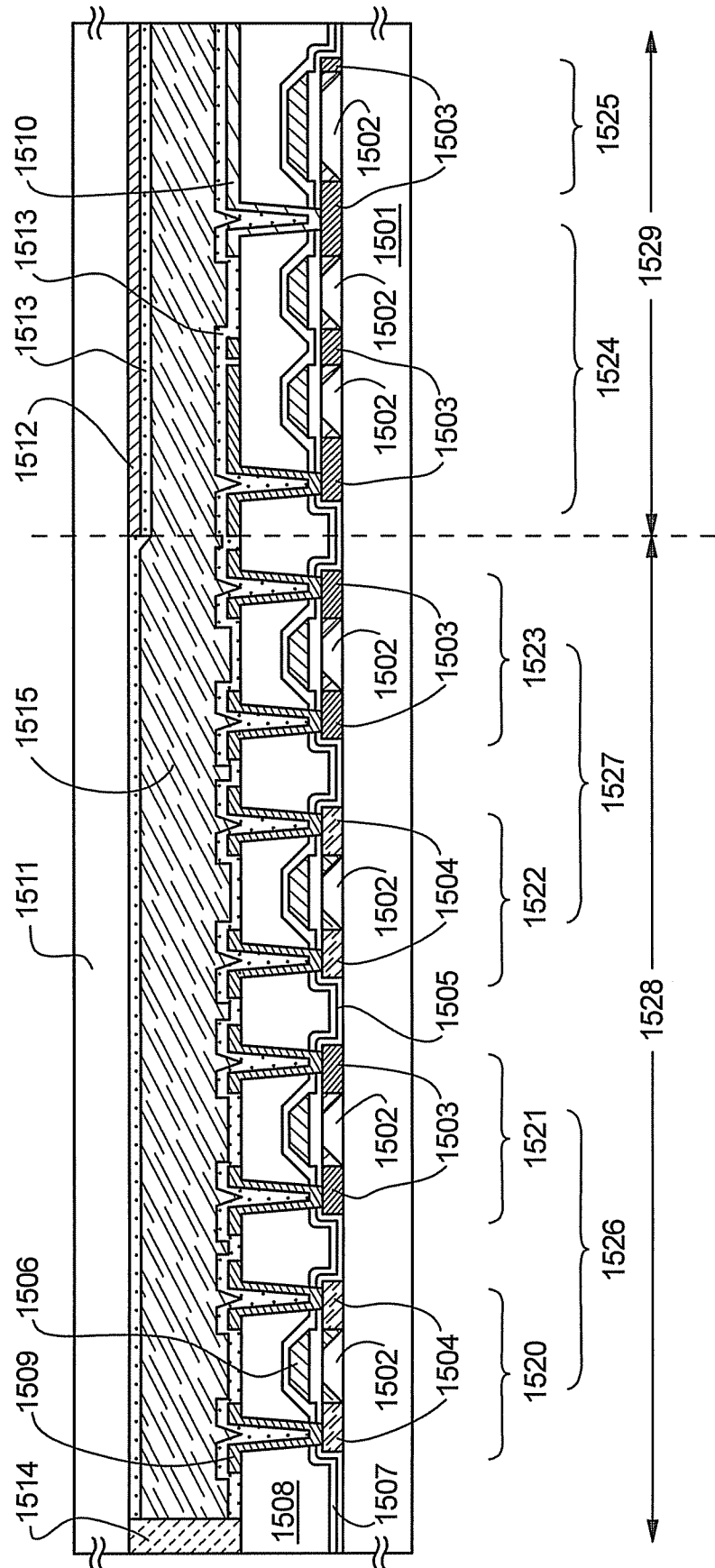
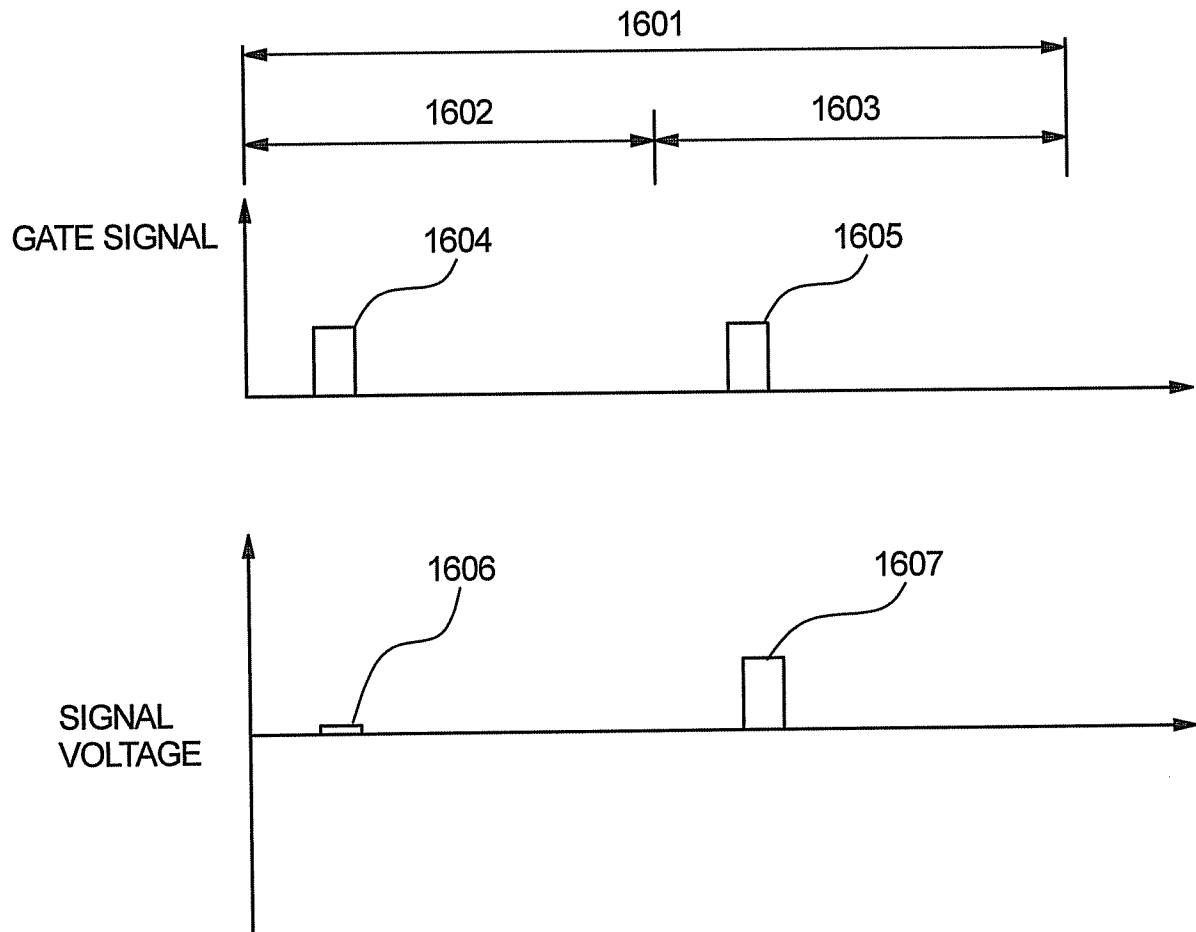


FIG. 15

*FIG. 16*

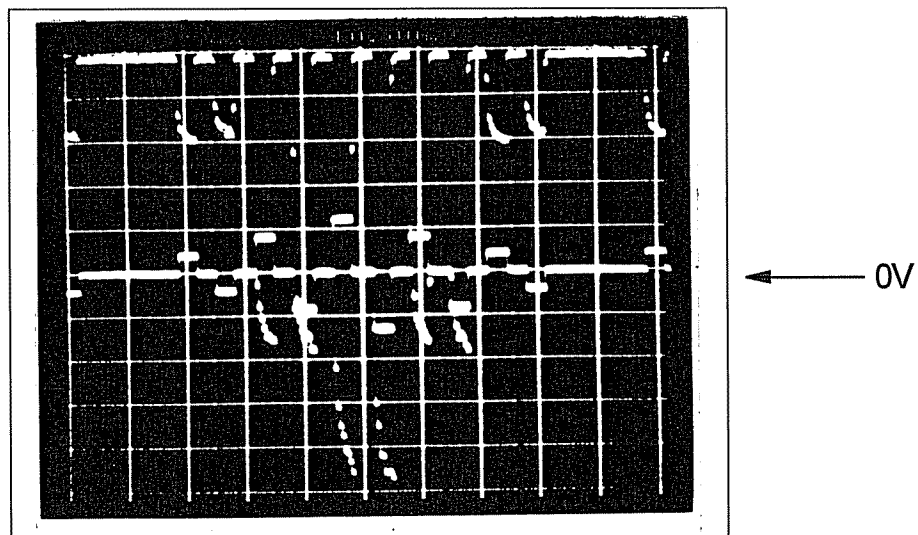


FIG. 17A

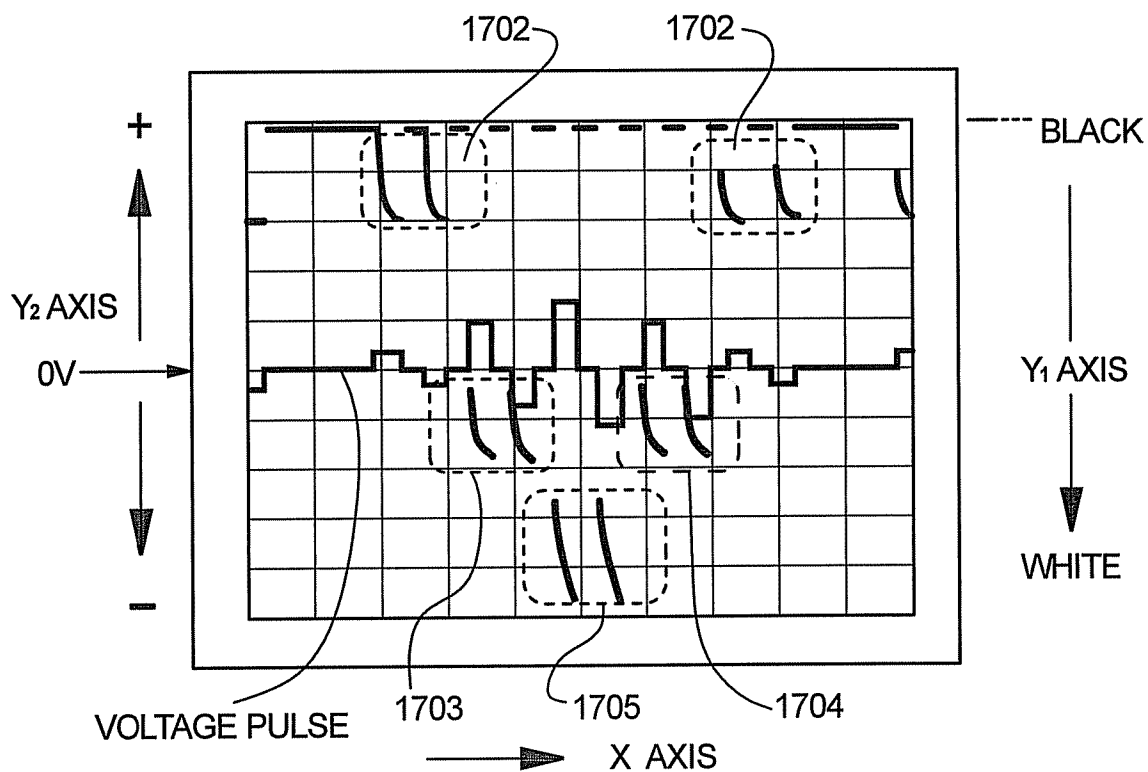
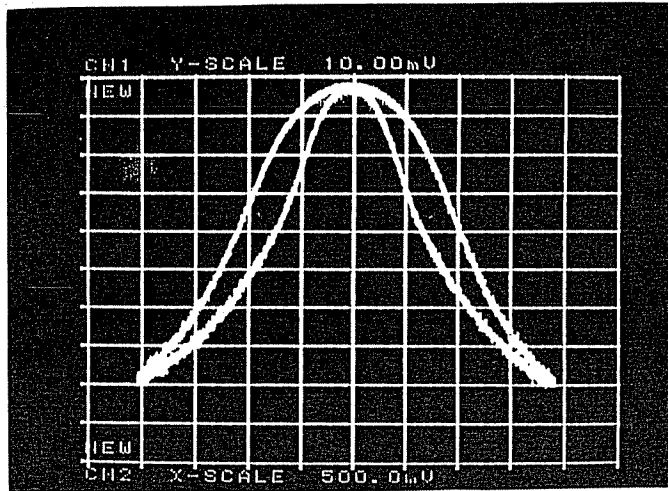


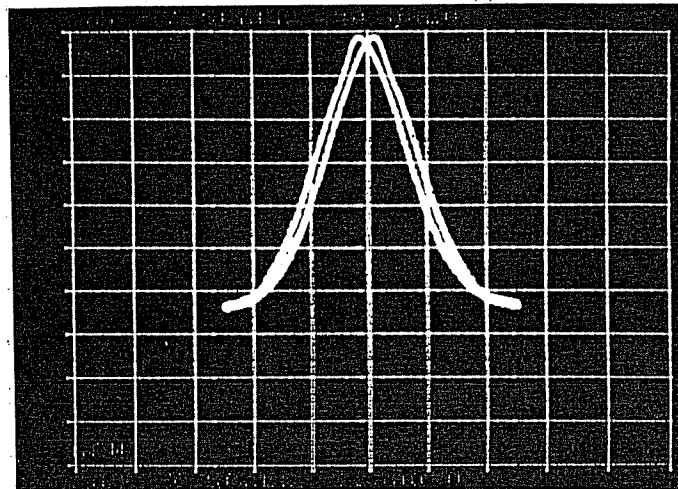
FIG. 17B

OPTICAL RESPONSE OF THRESHOLDLESS LIQUID CRYSTAL
WHEN "0V" RESET PERIOD IS PROVIDED



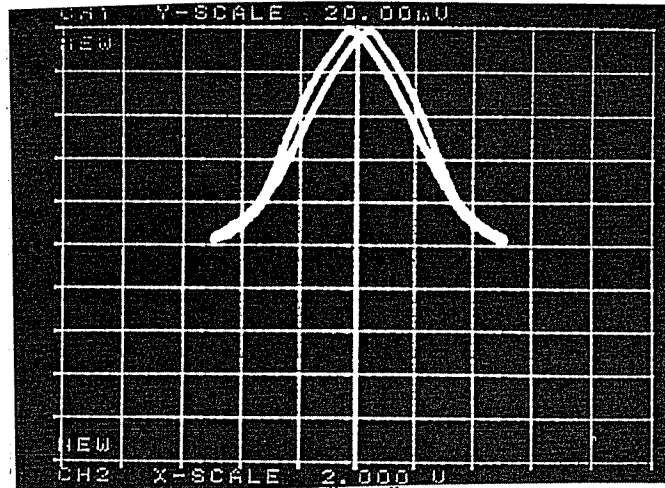
THICKNESS OF ORIENTATION FILM: 30nm

FIG. 18A



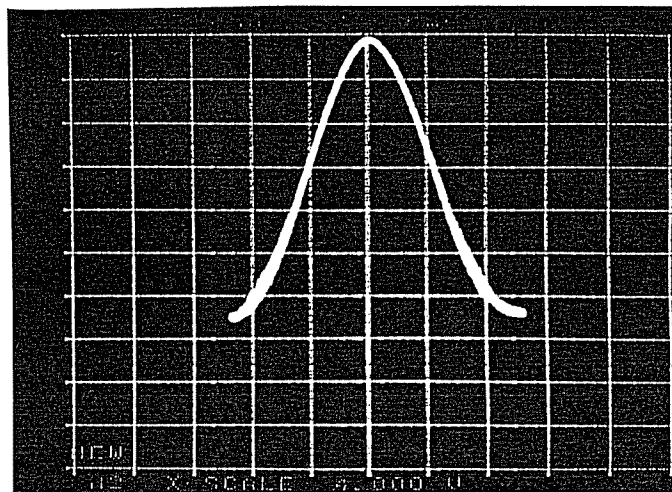
THICKNESS OF ORIENTATION FILM: 75nm

FIG. 18B



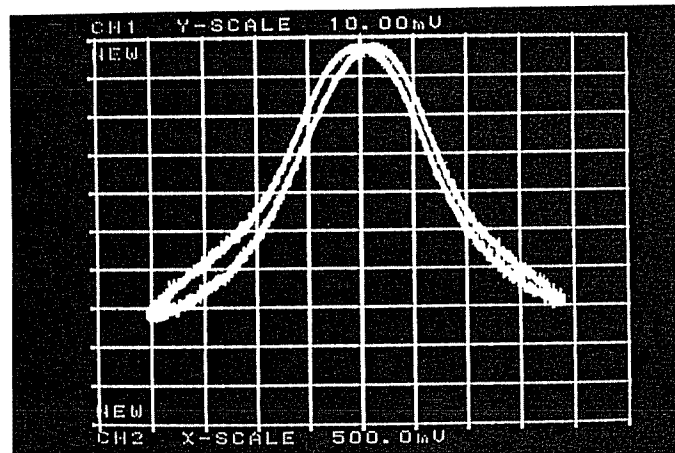
THICKNESS OF ORIENTATION FILM: 110nm

FIG. 18C



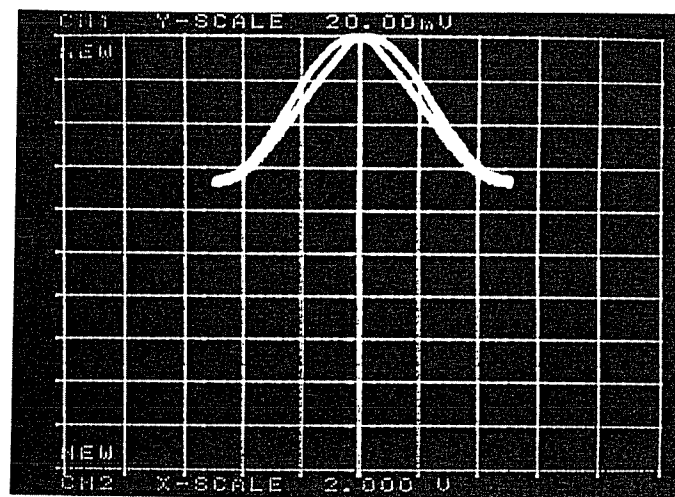
THICKNESS OF ORIENTATION FILM: 220nm

FIG. 18D



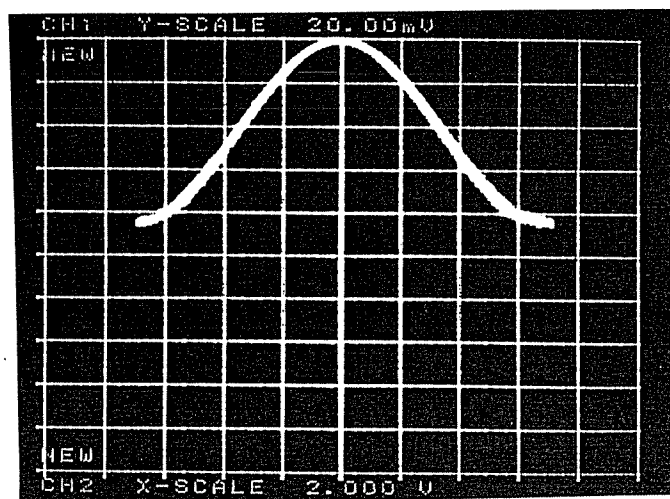
THICKNESS OF ORIENTATION FILM: 30nm

FIG. 19A



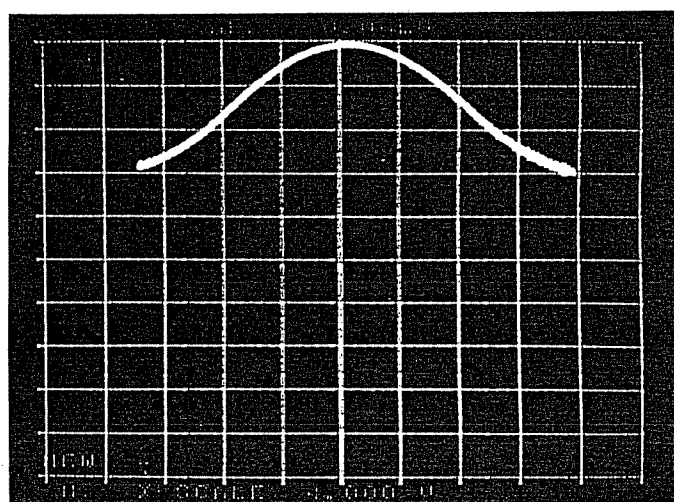
THICKNESS OF ORIENTATION FILM: 75nm

FIG. 19B



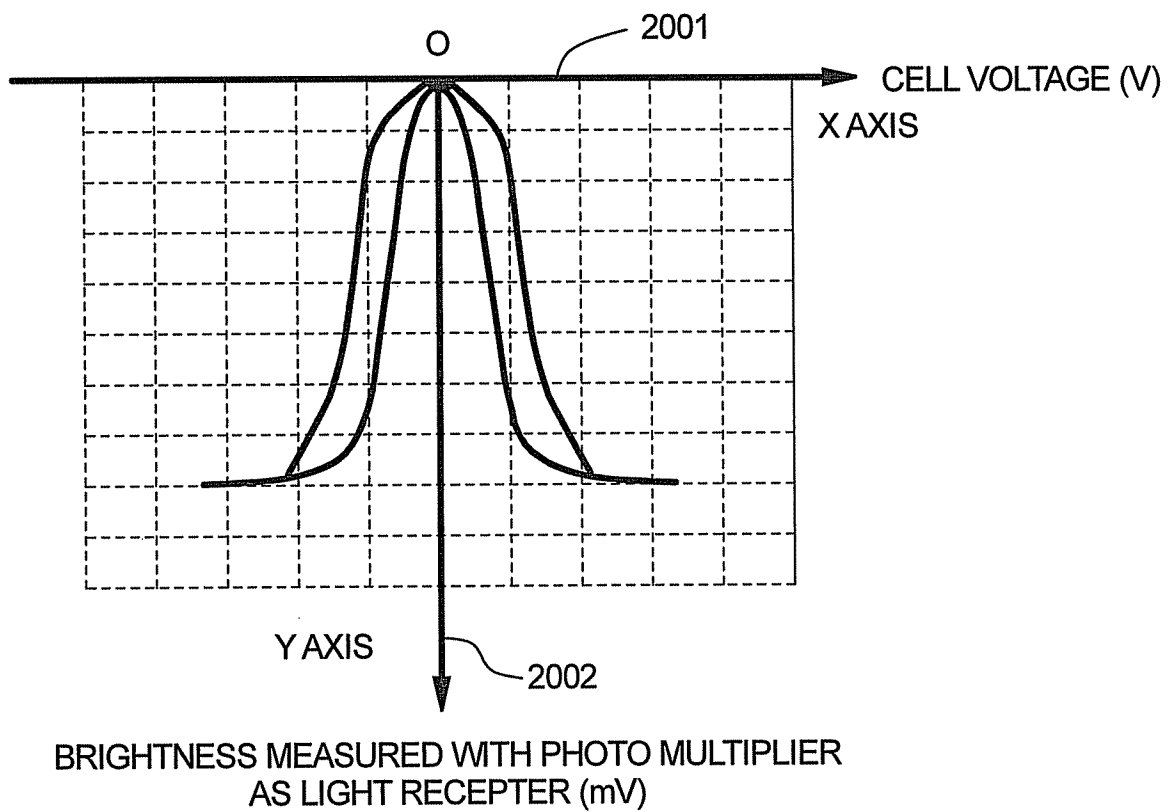
THICKNESS OF ORIENTATION FILM: 110nm

FIG. 19C



THICKNESS OF ORIENTATION FILM: 220nm

FIG. 19D

*FIG. 20*